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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,850	04/13/2001	Ulrich Zimmermann	113737.6	2752

7590

09/02/2003

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EXAMINER

NAFF, DAVID M

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 09/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent & Trademark Office

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APPLICATION NUMBER <u>09/762850</u>	FILING DATE <u>8/13/01</u>	FIRST NAMED APPLICANT <u>Zimmerman</u>	ATTORNEY DOCKET NO. <u>11737.6</u>
EXAMINER <u>[Signature]</u>			
ART UNIT <u>1651</u>		PAPER NUMBER <u>15</u>	

DATE MAILED:

This is a communication from the Examiner in charge of this application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**ADVISORY ACTION**

**THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.**

Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purpose of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see NOTE below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See attachment

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowed if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purpose of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: None

Claim(s) objected to: None

Claim(s) rejected: 29-42, 52 & 54

Claim(s) withdrawn from consideration: None

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved, or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

[Signature]  
DAVID M. NAFF  
PRIMARY EXAMINER  
ART UNIT 1651

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ATTACHMENT TO FORM PTOL-303

The claim limitation "raw algae material" (line 3 of claim 29) raises new issues for consideration, in particular, under 35 U.S.C. 112, second paragraph. Algae material being raw and not raw is relative and subjective, and it would be uncertain as to the form of algae material that is raw and not raw within the scope of the claims. It is unclear from the specification as to when during processing of algae material the algae material is converted from a raw algae material into a non-raw algae material. The specification at page 4, line 31 and page 7, line 1, recites "commercially available raw alginates". Commercial alginate is sodium alginate obtained from processing algae plants, and the claim limitation would not exclude commercial sodium alginate if this is intended.

In regard to the 35 U.S.C. 112 rejections, applicants refer to pages 14 and 16 of the specification as supporting the complex forming agent forming a solution of alginate by the agent removing multivalent cations and these cations being replaced with monovalent cations. However, pages 14 and 16 are describing the process after EDTA has been added. At page 13, lines 7-15, the specification describes the algae material being suspended in an EDTA solution or in the case of commercial alginate being dissolved. Page 13, lines 17-20, describes adding sodium carbonate and EDTA and stirring the suspension until a homogenous solution is obtained. There is no description of obtaining a solution by adding only EDTA to insoluble algae material containing multivalent cations, and these cations being replaced by monovalent

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cations that have not been added such as by adding sodium carbonate as described in the specification.

In response to the 35 U.S.C. 103 rejection, applicants urge that the claims require raw algae material and the references use commercial alginate. Even if the amendment had been entered, "raw alginate material" would not have excluded commercial alginate since the specification used the term "commercially available raw alginates".

Applicants further urge that in the process of the claims alginate is dissolved and impurities remain insoluble, whereas, in the processes of the references alginate remains solid and contaminants are dissolved in acid. While Klock et al produce barium alginate beads and treat the beads with acid, the beads are subsequently dissolved in an alkaline EDTA solution to form a sodium alginate solution, the solution is filtered and sodium alginate is precipitated (page 640, left col, last complete paragraph). It is apparent from this description that insoluble alginate containing multivalent cations (barium ions) is dissolved with an alkaline EDTA (complex forming agent) solution, and sodium ions in the solution replace the barium ions removed by the EDTA. Subsequent filtering removes insoluble impurities since there would be no reason to filter if insoluble material is not present after dissolving in the EDTA solution. Even if the amendment had been entered, the term "raw algae material" would not have excluded contacting barium alginate with EDTA

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since barium alginate can be considered raw algae material relative to the precipitated purified sodium alginate obtained by Klock et al.

In response to arguments traversing the 35 U.S.C. 102 rejection, it is granted that Balz et al does not use a complex forming agent.

5 However, the alginate obtained by the steps of Balz et al is highly pure since it is used in a drug composition, and there is inadequate evidence to establish the claimed process produces a more pure alginate and/or alginate that differs in other properties.

Any inquiry concerning this communication or earlier  
10 communications from the examiner should be directed to David M. Naff whose telephone number is 703-308-0520. The examiner can normally be reached on Monday-Friday about 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 703-308-  
15 4743. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703-308-0196.

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David M. Naff  
Primary Examiner  
Art Unit 1651

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